



Arbovirus Surveillance Program
Massachusetts Department of Public Health
Infectious Diseases Laboratory Division
State Laboratory Institute

Date: September 1, 2000

Thirty-three additional birds, found dead between August 21 and August 29 were confirmed positive for West Nile Virus (WNV), bringing the total number of positive birds to 74. Thirteen WNV positive birds were found in Brookline, three were submitted from the Jamaica Plain section of Boston. Three positive birds were also submitted from both Billerica and Cambridge; two from Peabody. One bird tested positive for WNV in each of the following towns: Waltham, Middleboro, Halifax, Holliston, Medford, Seekonk, Newton, Tewksbury and Needham. Preliminary test results on a horse from Bedford, that became ill on August 26th, indicate that it was infected with WNV. This is the first equine case of WNV in Massachusetts. One pool of *Culex restuans* mosquitoes trapped in Brookline on August 25th also tested positive for WNV.

The total number of WNV-infected birds by location to date is Brookline (29); Boston (16); Newton (5); Cambridge (3), Billerica (3), Holliston (2), Middleboro (2), Peabody (2) and one each from Arlington, Framingham, Halifax, Hopkinton, Medford, Needham, Seekonk, South Hadley, Tewksbury, Upton, Waltham and Wellesley.

Trapping continued at the sixteen regular long-term sites in Plymouth, Bristol, Norfolk, Middlesex and eastern Worcester Counties. Sites in Brookline and Boston were also trapped. In addition, Mosquito Control Projects throughout the state continue to send in mosquitoes for testing. Over 1600 mosquito pools collected from sites throughout Massachusetts have been tested to date. Samples from 3 emus from a group of 17 birds that died between August 15th and September 1st on a Norton farm have tested positive for EEEV. All of the dead birds exhibited symptoms consistent with EEEV infection.

To date, specimens have been submitted from 127 patients. One-hundred and ten have tested negative for WNV infections. Seventeen are pending. Weekly arbovirus reports and informational material on WNV and EEEV can be accessed at <http://www.state.ma.us/dph>.

Total Number of Mosquitoes Analyzed: 19,452

Virus Isolates in Mosquito Pools:

Virus	Mosquito	Site	Collection Date
1 HJV	<i>Culex pipiens</i>	Boston	6/29/00
1 EEEV	<i>Culiseta melanura</i>	Easton	7/23/00
1 EEEV	<i>Culiseta melanura</i>	Boston	7/24/00
1 WNV	<i>Culex spp.</i>	Brookline	8/8/00
1 EEEV	<i>Culiseta melanura</i>	Foxboro	8/14/00
1 WNV	<i>Culex spp.</i>	Boston	8/20/00
1 WNV	<i>Culex restuans</i>	Brookline	8/25/00

WNV Positive Birds:

Site	Species	Date of Bird Death
Boston	Crow	7/22
Hopkinton	Crow	7/21
Boston	Robin	7/28
Brookline	Crow	8/1
Brookline	Grackle	8/6
Upton	Crow	8/6
Boston	Crow	8/7
Boston	Crow	8/8
Brookline	Crow	8/8
Brookline	Crow	8/8
Brookline	Crow	8/9
Wellesley	Crow	8/9
Brookline	Crow	8/10
Boston	Crow	8/12
Middleboro	Crow	8/13
Brookline	Crow	8/13
Arlington	Crow	8/14
Boston	Crow	8/13
Newton	Crow	8/13
Brookline	Crow	8/15
South Hadley	Crow	8/14
Newton	Crow	8/14
Boston	Crow	8/15
Brookline	Crow	8/15
Newton	Crow	8/15
Holliston	Crow	8/16
Boston	Crow	8/17
Boston	Sparrow	8/17
Boston	Crow	8/17
Boston	Crow	8/17
Brookline	Crow	8/17
Brookline	Crow	8/17
Newton	Crow	8/18
Brookline	Crow	8/18
Boston	Crow	8/18
Brookline	Crow	8/18
Boston	Crow	8/20
Brookline	Crow	8/19
Framingham	Crow	8/21
Brookline	Crow	8/19
Brookline	Crow	8/19
Brookline	Crow	8/21
Brookline	Crow	8/22
Waltham	Crow	8/22
Middelboro	Crow	8/22
Holliston	Crow	8/22
Medford	Crow	8/22
Brookline	Crow	8/22

Brookline	Sparrow	8/22
Peabody	Crow	8/22
Boston	Crow	8/23
Seekonk	Crow	8/21
Brookline	Bluebird	8/24
Cambridge	Crow	8/23
Brookline	Crow	8/24
Billerica	Crow	8/25
Brookline	Crow	8/24
Peabody	Crow	8/24
Brookline	Chickadee	8/24
Halifax	Crow	8/26
Brookline	Crow	8/25
Brookline	Crow	8/25
Cambridge	Crow	8/26
Boston	Crow	8/27
Brookline	Crow	8/27
Boston	Crow	8/27
Brookline	Crow	8/26
Brookline	Crow	8/27
Cambridge	Crow	8/28
Newton	Raven	8/28
Billerica	Crow	8/28
Tewksbury	Crow	8/28
Billerica	Crow	8/29
Needham	Crow	8/28

Mosquito Surveillance Test Report

08/26/00 to 09/01/00

*Mosquito Species**

*Virus in Mosquito Pools***

<i>Site</i>	<i>Cs mel</i>	<i>Cq per</i>	<i>Ae can</i>	<i>Ae vex</i>	<i>Cx pip</i>	<i>Cx other</i>	<i>Other Sp</i>	<i>EEEV</i>	<i>HJV</i>	<i>WNV</i>
Boston	0	0	0	0	0	0	0	0	0	0
Brockton	0	0	0	0	0	0	0	0	0	0
Canton	11	0	0	1	0	0	0	0	0	0
Carver	39	0	3	0	0	0	0	0	0	0
Easton	14	1	0	1	0	0	0	0	0	0
Foxboro	5	0	0	0	3	0	0	0	0	0
Greenfield	0	1	0	2	8	1	0	0	0	0
Halifax	50	0	0	1	0	0	0	0	0	0
Hanover	14	0	0	5	0	0	0	0	0	0
Holliston	8	0	0	1	1	0	0	0	0	0
Hopkinton	0	0	0	0	0	0	0	0	0	0
Kingston	8	0	0	0	1	0	0	0	0	0
Lakeville	7	0	0	0	4	0	0	0	0	0
Nantucket	0	0	0	0	41	4	0	0	0	0
New Bedford	90	0	0	0	2	0	0	0	0	0
Northampton	0	0	0	5	1	1	1	0	0	0
Norton	48	1	0	10	53	8	0	0	0	0
Pittsfield	0	0	0	0	89	21	2	0	0	0
Raynham	0	0	0	0	0	0	0	0	0	0
Reading	0	0	0	0	0	55	0	0	0	0
Rehoboth	0	0	0	0	0	0	0	0	0	0
South Hadley	0	0	0	0	0	0	0	0	0	0
Springfield	1	0	0	2	5	5	0	0	0	0
Upton	0	0	0	0	0	0	0	0	0	0
Walpole	14	4	0	3	0	0	0	0	0	0
Westboro	16	0	4	1	5	0	0	0	0	0
Westport	16	0	4	4	0	0	0	0	0	0
Total for DPH	341	7	11	36	213	95	3	0	0	0

Wednesday, September 06, 2000

Mosquito Surveillance Cumulative Test Report

5/31/00 to 9/1/00

*Mosquito Species**

*Virus in Mosquito Pools***

<i>Site</i>	<i>Cs mel</i>	<i>Cq per</i>	<i>Ae can</i>	<i>Ae vex</i>	<i>Cx pip</i>	<i>Cx other</i>	<i>Other Sp</i>	<i>EEEV</i>	<i>HJV</i>	<i>WNV</i>
Boston	1	0	0	0	547	337	0	0	0	0
Brockton	89	24	15	7	18	13	0	0	0	0
Brookline	0	0	0	0	71	18	2	0	0	1
Canton	137	92	27	21	18	14	0	0	0	0
Carver	146	340	21	2	15	4	0	0	0	0
Easton	651	23	242	5	78	77	1	1	0	0
Foxboro	239	83	53	9	36	9	0	1	0	0
Greenfield	2	2	0	5	42	12	3	0	0	0
Halifax	835	27	45	4	56	32	12	0	0	0
Hanover	131	7	7	33	16	6	1	0	0	0
Holliston	228	8	82	7	14	23	0	0	0	0
Hopkinton	0	0	1	13	143	341	1	0	0	0
Kingston	280	43	10	3	53	19	0	0	0	0
Lakeville	39	35	7	0	42	20	0	0	0	0
Nantucket	0	0	0	0	76	9	0	0	0	0
New Bedford	527	17	22	6	82	31	1	0	0	0
Northampton	1	3	18	250	30	2	2	0	0	0
Norton	89	2	1	32	177	24	0	0	0	0
Pittsfield	0	0	0	0	89	21	2	0	0	0
Raynham	80	23	21	15	20	13	15	0	0	0
Reading	0	0	0	0	0	55	0	0	0	0
Rehoboth	53	7	65	11	12	4	0	0	0	0
South Hadley	1	1	0	4	236	48	0	0	0	0
Springfield	19	4	7	17	60	35	0	0	0	0
Upton	0	0	0	0	0	57	1	0	0	0
Walpole	140	318	35	80	18	4	8	0	0	0
Westboro	214	33	54	12	62	18	6	0	0	0
Westport	72	1	29	8	2	18	2	0	0	0
<i>Total for DPH</i>	3974	1093	762	544	2013	1264	57	2	0	1

Mosquito Control Districts Cumulative Test Report through 9/1/00

Mosquito Species*

Virus in Mosquito Pools**

<i>Site</i>	<i>Cs mel</i>	<i>Cq per</i>	<i>Ae can</i>	<i>Ae vex</i>	<i>Cx pip</i>	<i>Cx other</i>	<i>Other Sp</i>	<i>EEEV</i>	<i>HJV</i>	<i>WNV</i>
Berkshire County MCD	0	0	0	0	0	0	4	0	0	0
Bristol County MCD	14	0	0	6	862	184	3	0	0	0
Cape Cod MCD	0	0	0	0	0	2899	0	0	0	0
Central MA MCD	0	0	0	0	134	179	3	0	0	0
CMMCP	0	0	0	0	66	253	4	0	0	0
East Middlesex MCD	0	0	2	0	311	1487	5	0	0	1
Essex County MCD	0	0	0	0	81	9	0	0	0	0
NCMCP	0	0	0	0	20	1	1	0	0	0
NCMCP-Westport	0	0	0	0	9	0	0	0	0	0
Norfolk County MCD	0	0	0	0	220	31	0	0	0	0
Northeast MCD	0	0	0	0	11	1	0	0	0	0
Plymouth County MCD	0	7	0	38	197	14	0	0	0	0
Suffolk County MCD	126	250	105	874	830	502	2	1	1	1
<i>Total for MCD</i>	140	257	107	918	2741	5560	22	1	1	2

***Mosquito species name abbreviations:**

Cs mel = *Culiseta melanura*

Cq per = *Coquillettidia perturbans*

Ae can = *Aedes canadensis*

Ae vex = *Aedes vexans*

Cx pip = *Culex pipiens*

****Virus name abbreviations:**

EEEV = Eastern Equine Encephalitis Virus

HJV = Highlands J Virus

WNV = West Nile Virus